

Qty 8 sets to ship Dec 23

Work Order ID 149945

149945

Page 1

August 15, 2016 1:16:18 PM

Item ID: D3049-1 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Bearpaw
Start Date: 9/30/2016 Start Qty: 16.00 *16* Cust Item ID:
Required Date: 10/21/2016 Req'd Qty: 16.00 *16* Customer:
Reference:

Approvals: Process Plan: SW Date: AUG 15 2016 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3049	Rev B								

110 0.00

110

Waterjet
FLOW CNC Waterjet

Memo 1.33
CUT BLANK AS PER FILE D3049-1_BLANK

(16) 16/09/26

120 0.00

120

HAAS 1
HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo 2.05
1-Inspect material for defects or damage prior to machining
2-Machine as per Folio FA165 and Dwg D3049 Identify as D3049-1
3-Deburr

16 16/10/18
DAS 49 9-89

130 0.00

130

QC
Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo 0.03

16 16/10/18
DAS 49 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 149945

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149945

Page 2

Item ID: D3049-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bearpaw

Stop

NS2

Start Date: 9/30/2016 Start Qty: 16.00

16

Cust Item ID:

Required Date: 10/21/2016 Req'd Qty: 16.00

16

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

QC8- Inspect parts - second check

0.00

140

QC

Memo

0.05

Quality Control

116

Ø

DAS
44
9-89 116-10-19

170

Identify as per dwg & Stock Location: **ST** 0.00

Packaging

170

Packaging

Memo

0.03

Packaging

1p OCT 19 2016

DAS
6
9-89

180

QC21- Final Inspection - Work Order Release 0.00

180

QC

Memo

0.27

Quality Control

DAS
21
9-89

OCT 19 2016

DAS
21
9-89

OCT 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 149945

149945

Parent Item: D3049-1

D3049-1

Parent Item Name: Bearpaw

Start Date: 9/30/2016

Required Date: 10/21/2016

Start Qty: 16.00

Required Qty: 16.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No			120	sf	297.2600	3.4	54.4			

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

oc 16/09/26

Location

Loc Qty

Loc Code

MAT018

297.26

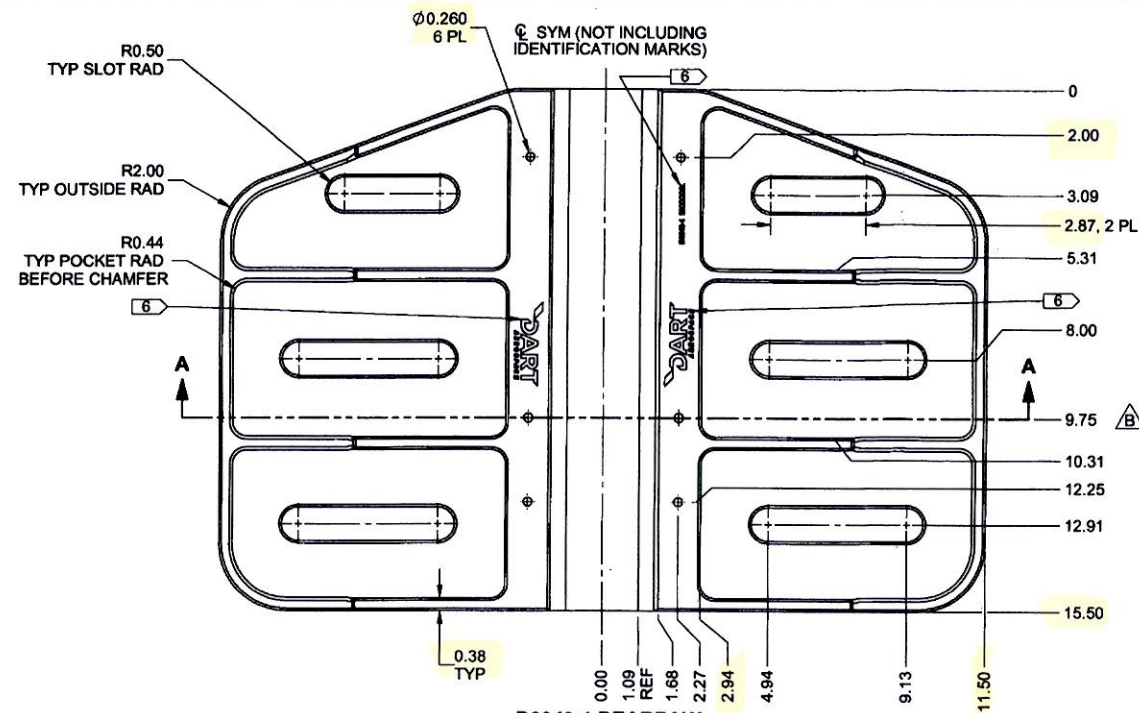
m134823

14.5

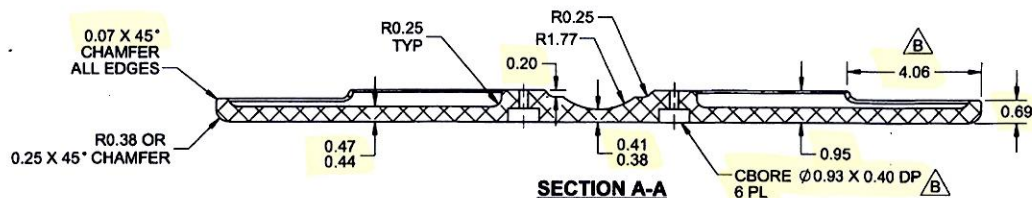
m135013

282.76

62



D3049-1 BEARPAW



SECTION A-A

NOTES:

- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL, 1.00 THICK MACHINED TO 0.95 (REF DART SPEC. MUHMWB10)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO, PART NUMBER "D3049-1" AND BATCH NUMBER "BXXXXX" IN ACCORDANCE WITH QSI 044 METHOD 6.3 TO MAX DEPTH OF 0.012 AS ILLUSTRATED
- 7) WEIGHT: 5.94 lbs
- 8) NON DIMENSIONED FEATURES PER CAD FILE "D3049-1-REV.B.STP"

RELEASED
2016-07-26
ECN 16-591

APPROVED

B	REVISE DWG TO CURRENT STANDARDS, ADDED 2 ADDITIONAL CBORE HOLES IN C6-1, UPDATE DIM'S DUE TO CAD ERROR, Ø0.93 WAS Ø0.75	ML	16.06.01
A	NEW ISSUE	RF	01.10.18
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC.	
DRAWN	ML	EUGENE, OR	
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	JLM	D3049	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BEARPAW	NTS
DATE	16.06.01	COPYRIGHT © 2001 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 149945
16-08-15

DART AEROSPACE LTD		Work Order:	149945
Description: Bearpaw		Part Number:	D3049-1
Inspection Dwg: D3049	Rev: A1 <i>B</i>		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A Ø0.260	+0.005/-0.000	.260	—		Vernier	
B 0.93	+/-0.030	.933	—		"	
C 0.40	+0.030/-0.000	.404	—		"	
D 2.00	+/-0.030	2.000	—		"	
E 10.250	+/-0.010	10.250	—		M-tape	
F 4.540	+/-0.030	4.540	—		Vernier	
G 5.88	+/-0.030	5.878	—		"	
H 0.38	+/-0.030	.380	—		"	
I 11.50	+/-0.030	11.500	—		"	
J 0.07 x 45°	+0.030/-0.010	.06x45°	—		"	
K 0.44 – 0.47	+/-0.000	.453	—		"	
L R0.25	+/-0.030	R.250	—		R-G	
M 0.38	+/-0.010	.389	—		Vernier	
N 0.95	+0.030/-0.010	.945	—		"	
O 0.69	+/-0.030	.692	—		"	
P 0.20	+/-0.030	.190	—		"	
Q 23.00	+/-0.030	23.000	—		M-tape	
R 0.25 x 45°	+/-0.030	.240x45°	—		Vernier	

Measured by:	DAS 14 49 9-89	Audited by:	DAS 44 9-89	Prototype Approval:	N/A
Date:	16/10/17	Date:	16-10-19	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D135-692-011	KJ/RF	
B	08.05.06	Dimension I revised	KJ/DD	